

**WHAT IS CLAIMED IS:**

5        1. Isolated DNA coding for the CstMI restriction enzyme, wherein the isolated DNA is obtainable from *Corynebacterium striatum*.

10      2. A recombinant DNA vector comprising a vector into which a DNA segment coding for the CstMI endonuclease has been inserted.

15      3. Isolated DNA coding for the CstMI endonuclease/methyltransferase, wherein the isolated DNA is obtainable from ATCC Accession No. \_\_\_\_\_.

20      4. A Vector which comprises the isolated DNA of claim 3.

25      5. A host cell transformed by the vector of claim 2 or 4.

25      6. A method of producing an CstMI restriction endonuclease and CstMI methylase comprising culturing the host cell of claim 5 under conditions suitable for expression of said endonuclease.

30      7. A substantially pure type II restriction endonuclease obtainable from *Corynebacterium striatum* recognizing the following base sequence in double-stranded deoxyribonucleic acid molecules:

5' -AAGGAGN20↓-3'  
3' -TTCCTCN18↑-5'

35      and having a cleavage position defined by the arrows.

8. A method for obtaining Type II restriction endonuclease of claim 7, comprising cultivating a sample of *Corynebacterium striatum* under conditions favoring the production of said endonuclease and separating said endonuclease therefrom.

9. The Type II restriction endonuclease of claim 7, wherein the restriction endonuclease is purified from GenBank Accession #AAG03371.